

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: io LED

Report Number: P274332

Luminaire Tested: **LD4B15DE010W2N2765 EU4B1020W2N902765 4LBDW0LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P274332
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-14)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD4B15DE010W2N2765 EU4B1020W2N902765 4LBDW0LI
Description: PORTFOLIO 4" W2N RN DOWNLIGHT, DOUBLE WALLWASH WITH SPECULAR FINISH
Light Source: W2N 2700K-6500K CCT TUNING RANGE
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1220.5 lumens
Efficiency: N/A
Efficacy: 55.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.32 / 1.18
Luminous Opening: Circular (Dia: 7.42' x H: 0')
CIE Type: Direct

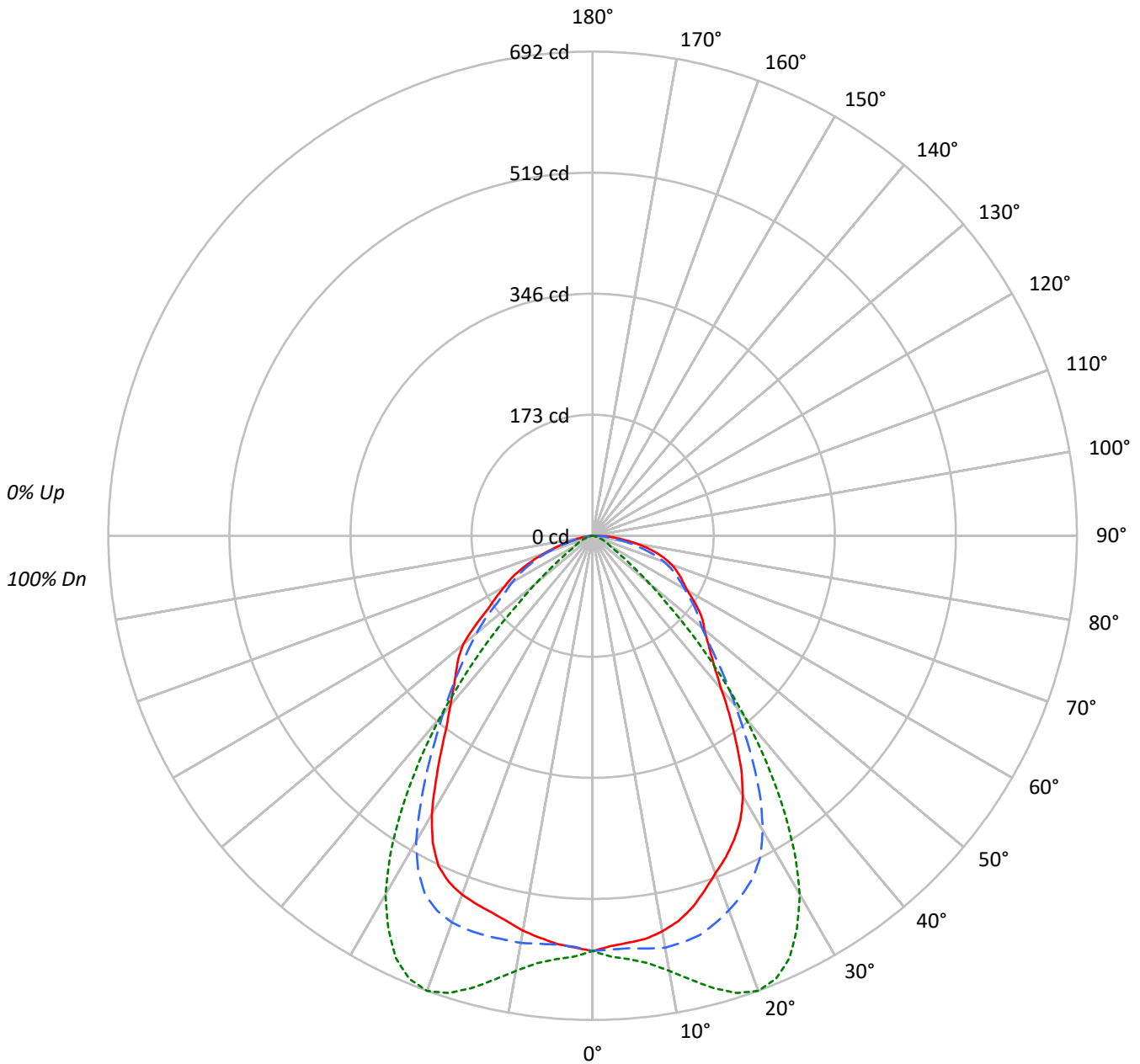
Input Watts (W): 22
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	110	106	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87																			
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76																			
3	94	85	78	72	92	84	77	72	81	75	71	78	73	69	76	72	68	66																			
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	58																			
5	81	70	62	56	79	69	61	56	67	60	55	65	59	54	63	58	54	52																			
6	76	64	56	50	74	63	55	50	61	54	49	59	53	49	58	53	48	47																			
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	54	48	44	42																			
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38																			
9	62	50	42	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35																			
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	148	148	148
5°	146	152	146
10°	145	160	145
15°	142	173	144
20°	136	184	145
25°	132	183	143
30°	124	170	132
35°	108	144	115
40°	93	110	103
45°	84	72	97
50°	81	41	94
55°	80	22	79
60°	78	15	73
65°	82	12	66
70°	87	8	54
75°	92	6	37
80°	90	4	24
85°	93	3	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.8	4.7
10°-20°	170.1	13.9
20°-30°	259.4	21.3
30°-40°	258.9	21.2
40°-50°	190.9	15.6
50°-60°	130.4	10.7
60°-70°	92.1	7.5
70°-80°	49.2	4.0
80°-90°	12.6	1.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	486.3	39.8
0°-40°	745.2	61.1
0°-60°	1066.5	87.4
0°-90°	1220.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1220.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	593	593	593	593	593	
5°	584	592	608	586	586	55
15°	550	591	669	592	557	154
25°	479	540	666	566	521	219
35°	356	402	474	414	377	223
45°	239	250	205	268	276	186
55°	185	178	50	166	182	165
65°	138	131	20	101	112	137
75°	95	78	6	35	39	99
85°	33	21	1	4	0	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	593.4	593.4	593.4	593.4	593.4	593.4	593.4	593.4	593.4
2.5°	587.2	590.8	591.7	597.8	602.2	596.9	588.1	588.1	589.0
5°	583.7	588.1	591.7	602.2	607.5	598.7	586.4	584.6	585.5
7.5°	581.1	587.2	595.2	611.1	616.3	604.9	588.1	581.1	579.3
10°	574.0	582.8	597.8	620.8	631.3	617.2	590.8	577.5	573.1
12.5°	564.3	574.9	595.2	631.3	649.9	628.7	590.8	571.4	564.3
15°	550.2	561.7	590.8	640.2	669.2	641.0	591.7	565.2	557.3
17.5°	531.7	545.8	581.1	644.6	685.1	652.5	590.8	560.8	552.0
20°	513.2	529.9	569.6	644.6	692.2	656.9	588.1	556.4	545.8
22.5°	497.3	514.1	556.4	636.6	685.1	651.6	580.2	548.4	536.1
25°	478.8	496.4	540.5	619.9	665.7	635.7	566.1	532.6	521.1
27.5°	457.6	477.0	518.5	593.4	632.2	606.6	539.6	507.0	494.7
30°	429.4	447.0	485.8	555.5	591.7	567.0	504.4	470.9	459.4
32.5°	395.0	410.9	447.0	509.7	537.0	516.7	458.5	430.3	417.1
35°	356.2	370.3	402.1	451.5	474.4	462.0	413.5	387.1	377.4
37.5°	320.1	330.7	357.1	393.3	407.4	399.4	369.5	350.1	342.1
40°	285.7	296.3	317.4	335.1	338.6	341.2	332.4	320.1	315.7
42.5°	259.2	268.9	282.2	280.4	269.8	284.8	298.9	297.2	293.6
45°	239.0	246.0	250.4	224.0	205.4	230.1	268.1	277.8	276.0
47.5°	222.2	225.7	223.1	179.0	145.5	179.0	240.7	260.1	260.1
50°	208.1	210.7	203.7	149.0	104.9	143.7	216.9	238.1	241.6
52.5°	198.4	199.3	190.5	126.1	72.3	113.7	191.3	209.9	212.5
55°	185.2	186.0	178.1	109.3	50.3	89.9	165.8	182.5	182.5
57.5°	170.2	171.9	164.0	95.2	35.3	74.9	146.4	162.2	163.1
60°	156.1	157.0	151.7	84.6	29.1	64.4	132.3	145.5	145.5
62.5°	146.4	147.3	141.1	78.5	24.7	56.4	117.3	129.6	130.5
65°	138.4	138.4	131.4	72.3	20.3	47.6	101.4	112.0	112.0
67.5°	129.6	127.9	120.8	64.4	15.9	38.8	85.5	93.5	92.6
70°	119.9	117.3	108.5	55.6	11.5	30.9	67.0	73.2	74.1
72.5°	108.5	104.9	93.5	45.9	8.8	22.9	49.4	54.7	54.7
75°	95.2	90.8	77.6	36.2	6.2	15.9	35.3	38.8	38.8
77.5°	79.4	74.9	61.7	26.5	4.4	10.6	23.8	26.5	26.5
80°	62.6	58.2	45.9	18.5	2.6	6.2	15.0	17.6	16.8
82.5°	46.7	42.3	30.9	11.5	1.8	3.5	9.7	9.7	8.8
85°	32.6	30.0	21.2	7.1	0.9	1.8	4.4	1.8	0.0
87.5°	22.0	19.4	13.2	3.5	0.0	0.9	0.9	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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— 0°-180° - - 45°-225° - - - - 90°-270°







(END OF REPORT)